

USP9X / FAM Antibody
Goat Polyclonal Antibody
Catalog # ALS12999**Specification**

USP9X / FAM Antibody - Product Information

Application	IHC
Primary Accession	O93008
Reactivity	Human, Monkey
Host	Goat
Clonality	Polyclonal
Calculated MW	292kDa KDa

USP9X / FAM Antibody - Additional Information**Gene ID** 8239**Other Names**

Probable ubiquitin carboxyl-terminal hydrolase FAF-X, 3.4.19.12, Deubiquitinating enzyme FAF-X, Fat facets in mammals, hFAM, Fat facets protein-related, X-linked, Ubiquitin thioesterase FAF-X, Ubiquitin-specific protease 9, X chromosome, Ubiquitin-specific-processing protease FAF-X, USP9X, DFFRX, FAM, USP9

Target/Specificity

Human USP9X. This antibody is expected to recognize isoform 3 (NP_001034679.2)

Reconstitution & Storage

Store at -20°C. Minimize freezing and thawing.

Precautions

USP9X / FAM Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

USP9X / FAM Antibody - Protein Information**Name** USP9X ([HGNC:12632](#))**Synonyms** DFFRX, FAM, USP9**Function**

Deubiquitinase involved both in the processing of ubiquitin precursors and of ubiquitinated proteins (PubMed: [19135894](http://www.uniprot.org/citations/19135894), PubMed: [25944111](http://www.uniprot.org/citations/25944111), PubMed: [18254724](http://www.uniprot.org/citations/18254724), PubMed: [22371489](http://www.uniprot.org/citations/22371489), PubMed: [29626158](http://www.uniprot.org/citations/29626158)). May therefore play an important regulatory role at the level of protein turnover by preventing degradation of proteins through the removal of conjugated

ubiquitin (PubMed:19135894, PubMed:25944111, PubMed:22371489, PubMed:18254724, PubMed:29626158). Specifically hydrolyzes 'Lys-63', 'Lys-48', 'Lys-29'- and 'Lys-33'-linked polyubiquitins chains (PubMed:25944111, PubMed:18254724, PubMed:33378666). Essential component of TGF-beta/BMP signaling cascade (PubMed:19135894). Specifically deubiquitinates monoubiquitinated SMAD4, opposing the activity of E3 ubiquitin-protein ligase TRIM33 (PubMed:19135894). Deubiquitinates alkylation repair enzyme ALKBH3 (PubMed:25944111). OTUD4 recruits USP7 and USP9X to stabilize ALKBH3, thereby promoting the repair of alkylated DNA lesions (PubMed:25944111). Deubiquitinates mTORC2 complex component RICTOR at 'Lys-294' by removing 'Lys-63'-linked polyubiquitin chains, stabilizing RICTOR and enhancing its binding to MTOR, thus promoting mTORC2 complex assembly (PubMed:33378666). Regulates chromosome alignment and segregation in mitosis by regulating the localization of BIRC5/survivin to mitotic centromeres (PubMed:16322459). Involved in axonal growth and neuronal cell migration (PubMed:24607389). Regulates cellular clock function by enhancing the protein stability and transcriptional activity of the core circadian protein BMAL1 via its deubiquitinating activity (PubMed:29626158). Acts as a regulator of peroxisome import by mediating deubiquitination of PEX5: specifically deubiquitinates PEX5 monoubiquitinated at 'Cys-11' following its retrotranslocation into the cytosol, resetting PEX5 for a subsequent import cycle (PubMed:22371489). Deubiquitinates PEG10 (By similarity).

Cellular Location

Cytoplasm, cytosol. Cell projection, growth cone. Cytoplasm, cytoskeleton, cilium axoneme

Tissue Location

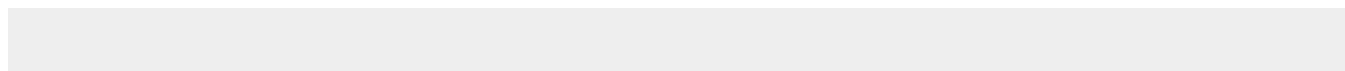
Widely expressed in embryonic and adult tissues.

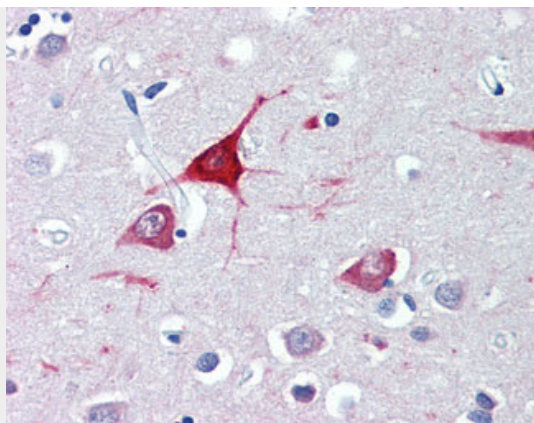
USP9X / FAM Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

USP9X / FAM Antibody - Images





Anti-USP9X antibody IHC of human brain, cortex.

USP9X / FAM Antibody - Background

Deubiquitinase involved both in the processing of ubiquitin precursors and of ubiquitinated proteins. May therefore play an important regulatory role at the level of protein turnover by preventing degradation of proteins through the removal of conjugated ubiquitin. Essential component of TGF-beta/BMP signaling cascade. Regulates chromosome alignment and segregation in mitosis by regulating the localization of BIRC5/survivin to mitotic centromeres. Specifically hydrolyzes both 'Lys-29'- and 'Lys-33'-linked polyubiquitins chains. Specifically deubiquitinates monoubiquitinated SMAD4, opposing the activity of E3 ubiquitin-protein ligase TRIM33. Involved in axonal growth and neuronal cell migration.

USP9X / FAM Antibody - References

- Jones M.H.,et al.Hum. Mol. Genet. 5:1695-1701(1996).
- Jones M.H.,et al.Hum. Mol. Genet. 6:334-335(1996).
- Ross M.T.,et al.Nature 434:325-337(2005).
- Yu W.,et al.Submitted (JUN-1998) to the EMBL/GenBank/DDBJ databases.
- Rush J.,et al.Nat. Biotechnol. 23:94-101(2005).